

## TEAC

## **SERVICE MANUAL**

# PD-H500i

**Compact Disc Player** 

#### **NOTES**

- PC boards shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- A Parts marked with this sign are safety critical compo-

They must be replaced with identical components- refer to the appropriate parts list and ensure exact replacement.

Parts of [ ] mark can be used only with the version designated.

[J]: JAPAN [US]: U.S.A. [C]: CANADA

[E]: EUROPE [UK]: U.K. [GE]: GENERAL EXPORT

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## **Specifications**

Laser System : 3-beam laser

Digital Filter : 8-times oversampling

Frequency Response : 20-20,000Hz(±1dB)

Error Correction Method :

Cross Interleave Reed-Solomon code

S/N Ratio : More than 100dB

(IHF "A" Filter used)

T.H.D : Less than 0.007(1kHz)

Output Voltage : 2V RMS

#### General

Power requirements : 230V, 50Hz Power Consumption : 10W

Dimensions(W×H×D) :  $285 \times 131 \times 292$ mm

Weight : 3.9kg

#### Standard accessories

- Improvements may result in specifications and features changing without notice.
- Illustrations may differ slightly from production models.

## IC PIN FUNCTION

## **CXD2529Q** (Digital Signal Processor)

Γ	NO.	SYMBOL		I/O	DESCRIPTION	
	1	VDD	_	-	Power supply(+5V).	
	2	Vss	_	_	GND.	
	3	LMUT	0	1,0	Left-channel zero detection flag.	
	4	RMUT	0	1,0	Right-channel zero detection flag.	
	5	TES2	0	1,0	TEST output pin; normally open.	
	5	1232	O	1,0	Master clock frequency-divider output. Selects and outputs XTAI×1,× 1/2,	
	6	CKOUT	0	1,0	$\times$ 1/4 or low only.	
	7	SQCK	1		SQSO readout clock input.	
	8	SQSO	Ó	1,0	Sub Q 80-bit serial output.	
	9	SENS	0	1,0	SENS output to CPU.	
	10	DATA	1	1,0	Serial data input from CPU.	
	11	XLAT	i		Latch input from CPU. Serial data is latched at the falling edge.	
	12	CLOK	1		Serial data transfer clock input from CPU.	
	13	SEIN	1		SENS input from SSP.	
	14	CNIN	i		Track jump count signal input.	
1	15	DATO	o	1,0	Serial data output to SSP.	
	16	XLTO	0	1,0	Serial data latch output to SSP. Latched at the falling edge.	
	17	CLKO	0	1,0	Serial data transfer clock output to SSP.	
	18	SPOA	1	1,0	Microcomputer extended interface (input A).	
	19	SPOB	1		Microcomputer extended interface (input A).	
	20	SPOC	1		Microcomputer extended interface (input C).	
	21	SPOD	1		Microcomputer extended interface (input D).	
	22	XLON	o	1,0	Microcomputer extended interface (output).	
	24	XLON	O	1,0	Focus OK input.	
	23	FOK	1		Used for SENS output and the servo auto sequencer.	
	24	VDD	_	_	Power supply (+5V).	
	25	Vss	_	_	GND.	
1	26	MON	0	1,0	Spindle motor on/off control output.	
	27	MDP	0	1,Z,0	Spindle motor servo control.	
	28	MDS	0	1,Z,0	Spindle motor servo control.	
	20	11100			GFS is sampled at 460Hz; when GFS is high, this pin outputs a high signal.	
1	29	LOCK	0	1,0	If GFS is low eight consecutive samples, this pin outputs low.	
	30	PWMI	1		Spindle motor external control input.	
	31	TES0	í		TEST pin; normally GND.	
	32	TES1	i		TEST pin; normally GND.	
	33	VPCO2	0	1,Z,0	Wide-band EFM PLL charge pump output. Turned on/off by FCSW of address E.	
1	34	VPCO1	0	1,Z,0	Charge pump output for the wide-band EFM PLL.	
	35	VCKI	1		VCO2 oscillation input for the wide-band EFM PLL.	
1	36	V16M	0	1,0	VCO2 oscillation output for the wide-band EFM PLL.	
	37	VCTL	ī		VCO2 control voltage input for the wide-band EFM PLL.	
	38	PCO	0	1,Z,0	Master PLL charge pump output.	
	39	FILO	1	Analog	Master PLL (slave=digital PLL) filter output.	
	40	FILI	1	3	Master PLL filter input.	
	41	AVss	_	2	Analog GND.	
	42	CLTV	1		Master VCO control voltage input.	
	43	AVDD	_	_	Analog power supply (+5V).	
	44	RF	1		EFM signal input.	
	45	BIAS	Ī		Constant current input of the asymmetry circuit.	
	46	ASYI	1		Asymmetry comparator voltage input.	
	47	ASYO	0	1,0	EFM full-swing output (low=Vss, high=VDD)	
	48	ASYE	1	,	Low: asymmetry circuit off; high: asymmetry circuit on.	
	49	WDCK	0	1,0	D/A interface. Word clock = 2fs.	
	50	LRCK	0	1,0	D/A interface. LR clock output f = fs.	
1	51	LRCKI	1		LR clock input.	

NO.	SYMBOL		<b>//O</b>	DESCRIPTION					
52	PCMD	0	1,0	D/A interface. Serial data output (two's complement, MSB first)					
53	PCMDI	1		D/A interface. Serial data input (two's complement, MSB first)					
54	BCK	0	1,0	D/A interface. Bit clock output.					
55	BCKI	<u> </u>		D/A interface. Bit clock input.					
56	Vss	_	_	GND.					
57	VDD	_	_	Power supply(+5V).					
58	GTOP	0	1,0	GTOP output.					
59	XUGF	0	1,0	XUGF output.	THE RESERVE TO THE PROPERTY OF				
60	XPCK	0	1,0	XPLCK output.					
61	GFS	0	1,0	GFS output.					
62	RFCK	0	1,0	RFCK output.					
	C2PO	0	1,0	C2PO output.					
63	XROF	0	1,0	XRAOF output.					
64				MNT3 output.					
65	MNT3	0	1,0	MNT1 output.					
66	MNT1	0	1,0						
67	MNT0	0	1,0	MNT0 output.	9699MH-				
68	XTSL	1		Crystal selector input. Low: 16.9344MHz; high: 33	3.0000IVITZ.				
69	FSTT	0	1,0	2/3 frequency-divider output for pins 89 and 90.	utout in CAV/W mode				
70	C4M	0	1,0	4.2336MHz output. 1/4 frequency-divided VCKI or	utput in CAV-VV mode.				
71	DOUT	О	1,0	Digital Out output.					
72	EMPH	0	1,0	Outputs a high signal when the playback disc ha	s emphasis, and a low signal				
/ 2	Z.W. 11	Ü	1,0	when there is no emphasis.					
73	EMPHI	ı		Inputs a high signal when de-emphasis is on, and	d a low signal when				
/3	CIVILLII	•		de-emphasis is off.					
74	WFCK	O	1,0	WFCK output.					
75	SCOR	0	1,0	Outputs a high signal when either subcode sync	S0 or S1 is detected.				
76	SBSO	O	1,0	Sub P to W serial output.					
77	EXCK	I		SBSO readout clock input.					
78	Vss	_	_	GND.					
79	VDD	_	-	Power supply (+5V).					
80	SYSM	1		Mute input. Active when high.					
81	NC								
82	AVss	_	-	Analog GND.					
83	AVDD	_	_	Analog power supply(+5V).					
84	AOUT1	0		Left-channel analog output.					
85	AIN1	1		Left-channel operational amplifier input.					
86	LOUT1	0		Left-channel LINE output.					
87	AVss	_	_	Analog GND.					
88	XVDD			Power supply for master clock.					
89	XTAI	1		Crystal oscillation circuit input. Input the external	l master clock via this pin.				
90	XTAO	Ó		Crystal oscillation circuit output.					
91	XVss	_		GND for master clock.					
92	AVss		_	Analog GND.					
93	LOUT2	0		Right-channel LINE output.					
94	AIN2	1		Right-channel operational amplifier input.					
95	AOUT2	Ö		Right-channel analog output.					
96	AVDD	-	_	Analog power supply(+5V).					
97	AVSS	_		Analog power supply(+5v).  Analog GND.					
	NC NC		_	, maiog circ.					
98	NC								
99				System reset. Reset when low.					
100	XRST	1		System reset, neset when low.					

Notes) • PCMD is an MSB first, two's complement output.

GTOP is used to monitor the frame sync protection status. (High: sync protecton window released)
XUGF is the negative pulse for the frame sync derived from the EFM signal. It is the signal before sync protec

• XPLCK is the inverse of the EFM PLL clock. The PLL is designed so that the falling edge of XPLCK and the EFM signal transition point coincide.

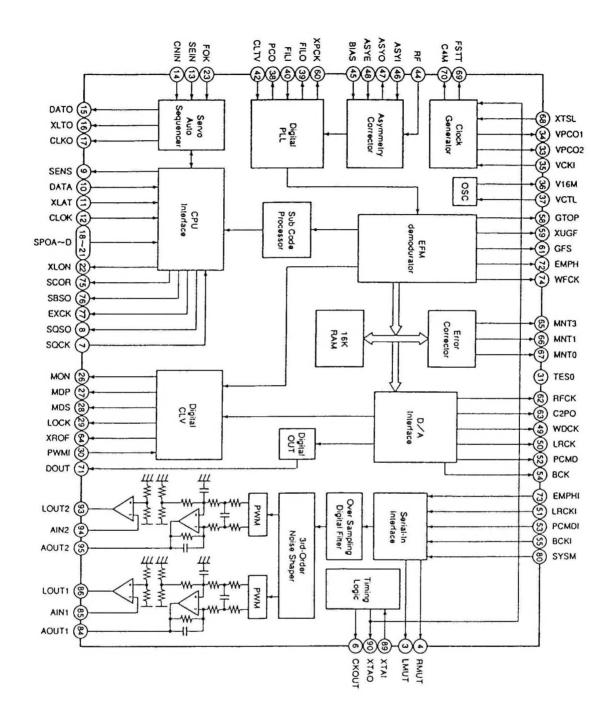
GFS goes high when the frame sync and the insertion protection timing match.

RFCK is derived with the crystal accuracy. This signal has a cycle of 136µs (during normal-speed).

C2PO represents the data error status.

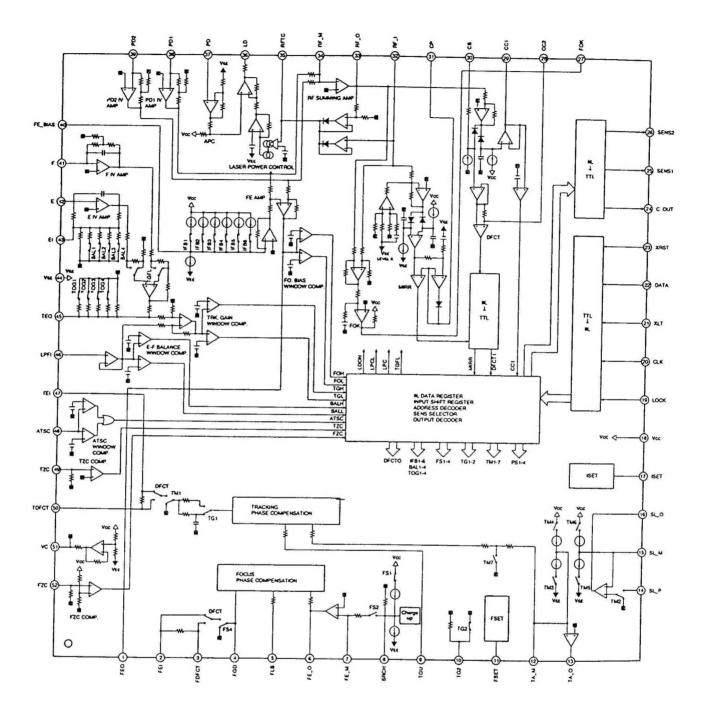
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- XRAOF is generated when the 16K RAM exceeds the  $\pm 4\text{F}$  jitter margin.



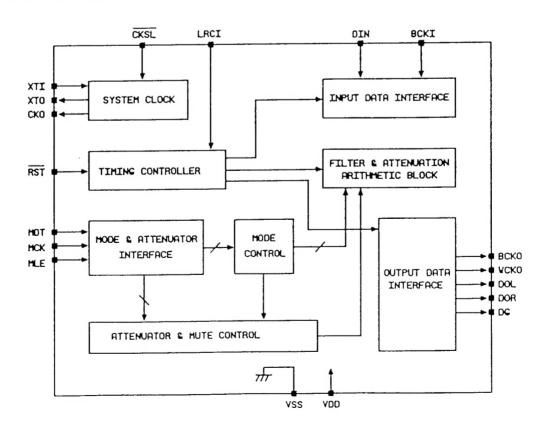
## CXA1992BR (RF AMP+Servo signal processor)

NO.	SYMBOL	I/O	DESCRIPTION
1	FEO	0	Focus error amplifier output.  Connected internally to the window comparator input for bias adjustment.
2	FEI	i	Focus error input.
3	FDFCT	i	Capacitor connection pin for defect time constant.
4	FGD	i	Ground this pin through a capacitor for cutting the focus servo high-frequency gain.
5	FLB	i i	External time constant setting pin for boosting the focus servo low-frequency.
6	FE-O	Ö	Focus drive output.
13	TA-O	0	Tracking drive output.
16	SL-O	0	Sled drive output.
7	FE-M	1	Focus amplifier inverted input.
8	SRCH	i i	External time constant setting pin for generating focus search waveform.
9	TGU	' '	External time constant setting pin for switching tracking high-frequency gain.
1	TG2	1	External time constant setting pin for switching tracking high-frequency gain.
10	FSET	,	Peak frequency setting pin for focus and tracking phase compensation amplifier.
11	TA-M	i	Tracking amplifier inverted input.
12 14	SL-P	'	Sled amplifier non-inverted input.
1	SL-M		Sled amplifier inverted input.
15	SL-IVI	,	Connect an external capacitance to set the current which determines the Focus
17	ISET	1	search, Track jump, and Sled kick heights.
10	Vcc	1	Positive power supply.
18	LOCK	,	The sled overrun prevention circuit operates when this pin is low.(no pull-up resistance)
19 20	CLK	1	Serial data transfer clock input from CPU. (no-pull-up resistance)
21	DATA	,	Serial data input from CPU.(no pull-up resistance)
22	XLT	1	Latch input from CPU.(no pull-up resistance)
23	XRST	,	Reset input; resets at Low.(no pull-up resistance)
23	C. OUT	Ö	Track number count signal output.
24	C. 001	O	Outputs FZC, DFCT1, TZC, BALH, TGH, FOH, ATSC, and others according to the
25	SENS1	0	command from CPU.
26	SENS2	0	Outputs DFCT2,MIRR,BALL,TGL,FOL, and others according to the command from the CPU.
27	FOK	0	Focus OK comparator output.
28	CC2	ı	Input for the defect bottom hold output with capacitance coupled.
29	CC1	Ö	Defect bottom hold output. Connected internally to the interruption comparator input.
30	CB	Ī	Connection pin for defect bottom hold capacitor.
31	CP	i	Connection pin for MIRR hold capacitor. MIRR comparator non-inverted input.
32	RF-I	i	Input for the RF summing amplifier output with capacitance coupled.
33	RF-O	Ö	RF summing amplifier output. Eyepattern check point.
34	RF-M	ı	RF summing amplifier inverted input. The RF amplifier gain is determined by the
		·	resistance connected between this pin and RFO pin.
35	RFTC	ı	External time constant setting pin durring RF level control.
36	LD	О	APC amplifier output.
37	PD	!	APC amplifier input.
38	PD1	- !	REI-V amplifier inverted input.
39	PD2	I	Connect these pins to the photo diode A+C and B+D pins.
40	FE-BIAS	1	Bias adjustment of focus error amplifier. Leave this pin open for automatic adjustment.
41	F	1	FI-V and EI-V amplifier inverted input.
42	E	i	Connect these pins to photo diode F and E.
43	EI	-	I-V amplifier E gain adjustment. (When not using automatic balance adjustment)
44	VEE	_	Negative power supply.
45	TEO	0	Tracking error amplifier output. E-F signal is output.
46	LPFI	l	Comparator input for balance adjustment. (input from TEO through LPF)
47	TEI	!	Tracking error input.
48	TDFCT	I .	Capacitor connection pin for defect time constant.
49	ATSC	!	Window comparator input for ATSC detection.
50	TZC	1	Tracking zero-cross comparator input.
51	VC	0	(VCC+VEE)/2 direct voltage output.
52	FZC		Focus zero-cross comparator input.



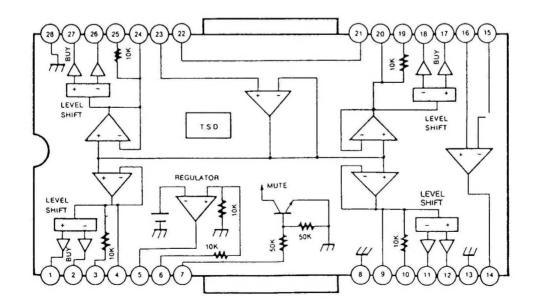
## SM5841AP (Digital filter)

NO.	SYMBOL	I/O	DESCRIPTION
1	CKLS	ΙP	Oscillator and input frequency select. 384fs when HIGH, and 256fs when LOW.
2	XTI	1	Oscillator input connection.
3	XTO	0	Oscillator output connection.
4	ско	0	Oscillator output clock (same frequency as XTI).
5	VSS	_	Ground
6	MDT	IP	Digital attenuator and mode set data .
7	MCK	IP	Digital attenuator and mode set clock.
8	MLE	IP	Digital attenuator and mode set latch enable.
9	RST	ΙP	System Reset.
10	DG	0	8fs left/right simultaneous of 4fs left/right alternating de-glitched output.
	505	0	Right-channel data output when in 8fs L/R simultaneous mode, and L/R clock
11	DOR	Ο	output in 4fs L/R alternating mode.
	501	0	Left-channel data output when in 8fs L/R simultaneous mode, and Left/Right
12	DOL	0	channel data output in L/R alternating mode.
13	WCKO	О	Output word clock.
14	VDD	_	5V supply.
15	BCKO	Ο	Output bit clock.
16	LRCI	IP	Input data sample rate (fs) clock.
17	BCKI	IP	Input bit clock.
18	DIN	IP	Data input.



## **KA9258D (Motor Driver)**

NO.	SYMBOL	1/0	DESCRIPTION		
1	DO1.1	0	DRIVE OUTPUT	12 NAME	
2	DO1.2	O	DRIVE OUTPUT		
3	DI1.1	Ī	DRIVE INPUT		
4	DI1.2	1	DRIVE INPUT	**************************************	
5	REG		REGULATOR		
6	REO	0	REGULATOR OUTPUT	t t fore maken	
7	MUTE	_	MUTE	100 100 0 00 100 100	
8	GND1	-	GROUND	TOTAL PARAMETER SE COMMUNICATION	
9	DI2.1	1	DRIVE INPUT	**************************************	
10	DI2.2	t	DRIVE INPUT		
11	DO2.1	0	DRIVE OUTPUT		
12	DO2.2	О	DRIVE OUTPUT	PAGE (Stew line	
13	GND2	_	GROUND		
14	OPOUT	0	OPAMP OUTPUT	***************************************	
15	OPIN (-)	1	OPAMP INPUT(-)	10 * NAC (1114) - HONNE	
16	OPIN (+)	1	OPAMP INPUT(+)	Annual Control of the State of	
17	DO3.1	0	DRIVE OUTPUT	2.14	
18	DO3.2	0	DRIVE OUTPUT		
19	DI3.1	1	DRIVE INPUT		
20	DI3.2	Ī	DRIVE INPUT		
21	VCC1	_	SUPPLY VOLTAGE		
22	VCC2	_	SUPPLY VOLTAGE		
23	VREF	-	2.5V BIAS VOLTAGE		
24	DI4.1	1	DRIVE INPUT		
25	D14.2	1	DRIVE INPUT		
26	DO4.1	0	DRIVE OUTPUT		
27	DO4.2	0	DRIVE OUTPUT		
28	GND3	<u></u>	GROUND		

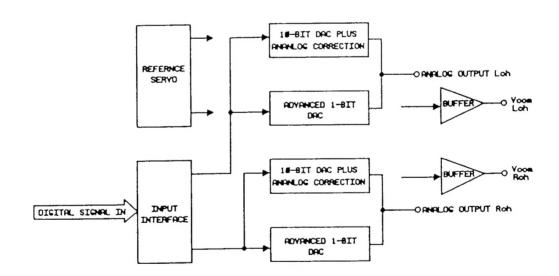


### PCM69AP (D/A CONVERTOR)

NO.	SYMBOL	DESCRIPTION
1	VCC	VCC, Analog +5V.
2	Vcom. L-ch	Reference Voltage (3.5V).
3	Lout. L-ch	L-ch current output.
4	Servo DC	Servo filter.
5	REF. DC	Reference filter.
6	Lout. R-ch	R-ch current output.
7	Vcom, R-ch	Reference voltage (3.5V)
8	A-GND	Ground (Analog).
9	D-GND	Ground (Digital).
10	Data, R-ch	R-ch data input.
11	BCK	Bit clock input.
12	SYS CLK	System clock input.
13	WDCK	Word clock input (44.1k).
14	Data, L-ch	L-ch data input.
15	TP1	Select pin for input data format.
16	VDD	VDD, Digital +5V.

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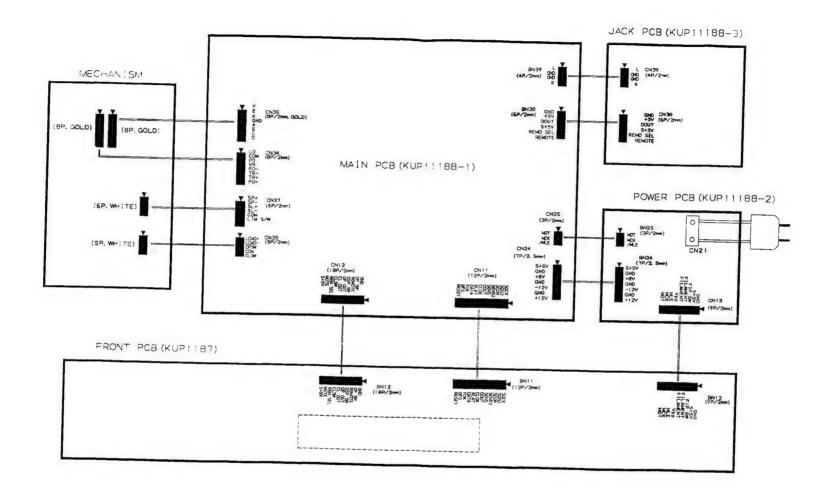
## IC70 BVIANAM1232C (μ-COM, TMP87PM78F)

NO.	SYMBOL	1/0	DESCRIPTION
1	VDD	-	+5V POWER SUPPLY PIN
2	F_MOTOR	0	MESHANISM OPEN CONTROL OUTPUT PIN
3	R_MOTOR	0	MESHANISM CLOSE CONTROL OUTPUT PIN
4	/MLE	0	DIGITAL ATTENUATOR AND MODE SET LATCH ENABLE
5	MCK	0	DIGITAL ATTENUATOR AND MODE SET CLOCK
6	MDT	0	DIGITAL ATTENUATOR AND MODE SET DATA
7	REMO SEL	1	REMOTE SELECTOR SWITCH CHECK PIN
8	TEST	1	OPTION(HIGH=AKAI)
9	NC	-	
10	SQCK	0	SUBCODE-Q DATA CLOCK OUTPUT PIN
11	SQSO		SUBCODE-Q DATA SERIAL INPUT PIN
12	NC		SOURCE IN STAN
13	SCOR	1 1	SUBCODE SYNC SIGNAL (S0+S1) INPUT PIN
14	OP/SW		OPEN SWITCH CHECK INPUT PIN
15	CL/SW	1	CLOSE SWITCH CHECK INPUT PIN
16	JOG B	-	SKIP DIAL CONTROL PIN
17	JOG A	_	SKIP DIAL CONTROL PIN
18~21	NC,	-	CRIT DIVE CONTINCE IN
22	GND	-	GROUND
23	AGND		GROUND
24	VREF		+5V POWER SUPPLY PIN
25	VDD		+5V POWER SUPPLY PIN
26	NC	+	+3010002113011211110
27	GND		GROUND
28, 29	NC		GHOOND
30	GND		GROUND
31	XIN	1	SYSTEM CLOCK OSCILLATION CRYSTAL INTERFACE INPUT PIN
32	XOUT	0	SYSTEM CLOCK OSCILLATION CRYSTAL INTERFACE OUTPUT PIN
33	RESET	1	SYSTEM RESET PIN
34	RE_IN	'	REMOCON DATA INPUT PIN
35	BUS_IN	1	REMOCON DATA INPUT PIN
36	BUS_OUT	0	REMOCON DATA OUTPUT PIN
37	SENS2	1	SSP STATUS INPUT PIN
38	SENS	·	
39	COUT	1	DSP STATUS INPUT PIN TRACK COUNT INPUT PIN
40	MUTE	0	AUDIO MUTE OUTPUT PIN
41			CLOCK OUTPUT PIN
41	CLOCK	0	
	XLAT	0	LATCH OUTPUT PIN
43	DATA	0	DATA OUTPUT PIN
44	F.OK	1	FOCUS OK INPUT PIN
45	GFS	1	FRAME SYNC STAUS INPUT PIN
46	DSP RESET	0	SYSTEM RESET FROM DSP OUTPUT PIN
47	POWER	0	SYSTME POWER ON/OFF OUTPUT PIN
48	FLT POWER	0	FIP FILAMENT POWER ON, OFF OUTPUT PIN

NO.	SYMBOL	I/O	DESCRIPTION
49	NC	-	
50	-30V	-	FIP VOLTAGE SUPPLY PIN
51	LED	0	STANBY LED ON/OFF OUTPUT PIN
52	LED	0	TIME EDIT LED ON/OFF OUTPUT PIN
53	LED	0	JUST EDIT LED ON/OFF OUTPUT PIN
54	LED	0	MANUAL FADE LED ON/OFF OUTPUT PIN
55	LED	0	AUTO SPACE LED ON/OFF OUTPUT PIN
56~58	NC	-	
59	KS_1	0	KEY SCAN OUTPUT PIN
60	KS_2	0	KEY SCAN OUTPUT PIN
61	KS_3	0	KEY SCAN OUTPUT PIN
62	KS_4	0	KEY SCAN OUTPUT PIN
63	KS_5	0	KEY SCAN OUTPUT PIN
64	KS_6	0	KEY SCAN OUTPUT PIN (NOT USED)
65	KS_7	0	KEY SCAN OUTPUT PIN (NOT USED)
66	KS_8	0	KEY SCAN OUTPUT PIN (NOT USED)
67	P1	0	FIP SEGEMENT SIGNAL OUTPUT PIN
68	P2	0	FIP SEGEMENT SIGNAL OUTPUT PIN
69	P3	0	FIP SEGEMENT SIGNAL OUTPUT PIN
70	P4	0	FIP SEGEMENT SIGNAL OUTPUT PIN
71	P5	0	FIP SEGEMENT SIGNAL OUTPUT PIN
72	P6	0	FIP SEGEMENT SIGNAL OUTPUT PIN
73	P7	0	FIP SEGEMENT SIGNAL OUTPUT PIN
74	P8	0	FIP SEGEMENT SIGNAL OUTPUT PIN
75	P9	0	FIP SEGEMENT SIGNAL OUTPUT PIN
76	P10	0	FIP SEGEMENT SIGNAL OUTPUT PIN
77	P11	0	FIP SEGEMENT SIGNAL OUTPUT PIN
78	P12	0	FIP SEGEMENT SIGNAL OUTPUT PIN
79	P13	0	FIP SEGEMENT SIGNAL OUTPUT PIN
80	P14	0	FIP SEGEMENT SIGNAL OUTPUT PIN
81	P15	0	FIP SEGEMENT SIGNAL OUTPUT PIN
82	P16	0	FIP SEGEMENT SIGNAL OUTPUT PIN
83	1G	0	FIP TIMING SIGNAL OUTPUT PIN
84	2G	0	FIP TIMING SIGNAL OUTPUT PIN
85	3G	0	FIP TIMING SIGNAL OUTPUT PIN
86	4G	0	FIP TIMING SIGNAL OUTPUT PIN
87	5G	0	FIP TIMING SIGNAL OUTPUT PIN
88	6G	0	FIP TIMING SIGNAL OUTPUT PIN
89	7G	0	FIP TIMING SIGNAL OUTPUT PIN
90	8G	0	FIP TIMING SIGNAL OUTPUT PIN
91~94	GND		GROUND
95	KI_4	<del>                                     </del>	KEY SCAN INPUT PIN
96	KI_3	1 1	KEY SCAN INPUT PIN
97	KI_2		KEY SCAN INPUT PIN
98	KI_1	+ ; +	KEY SCAN INPUT PIN
99	P17	0	FIP SEGMENT SIGNAL OUTPUT PIN
100	NC	+ - +	The second of th
	.,,		

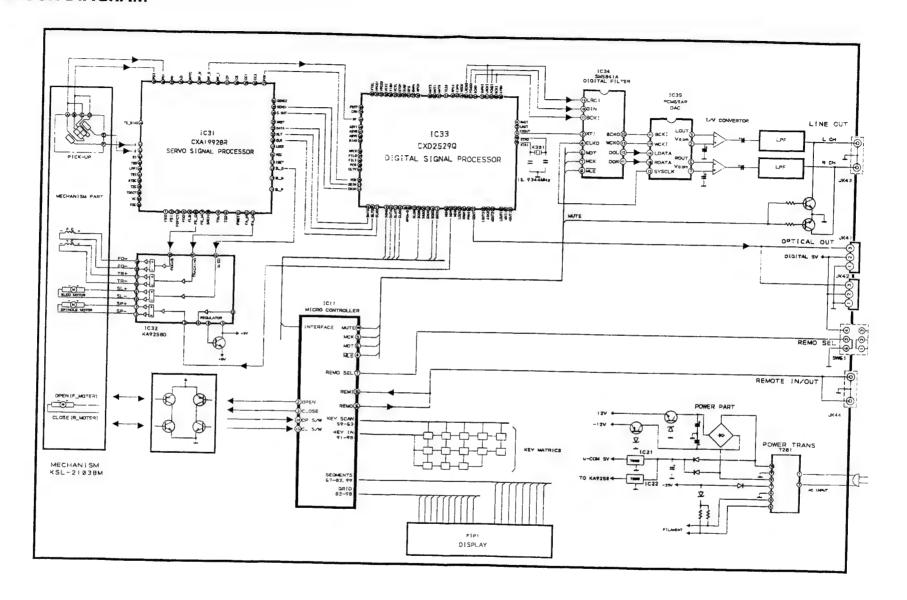
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#### **WIRING DIAGRAM**

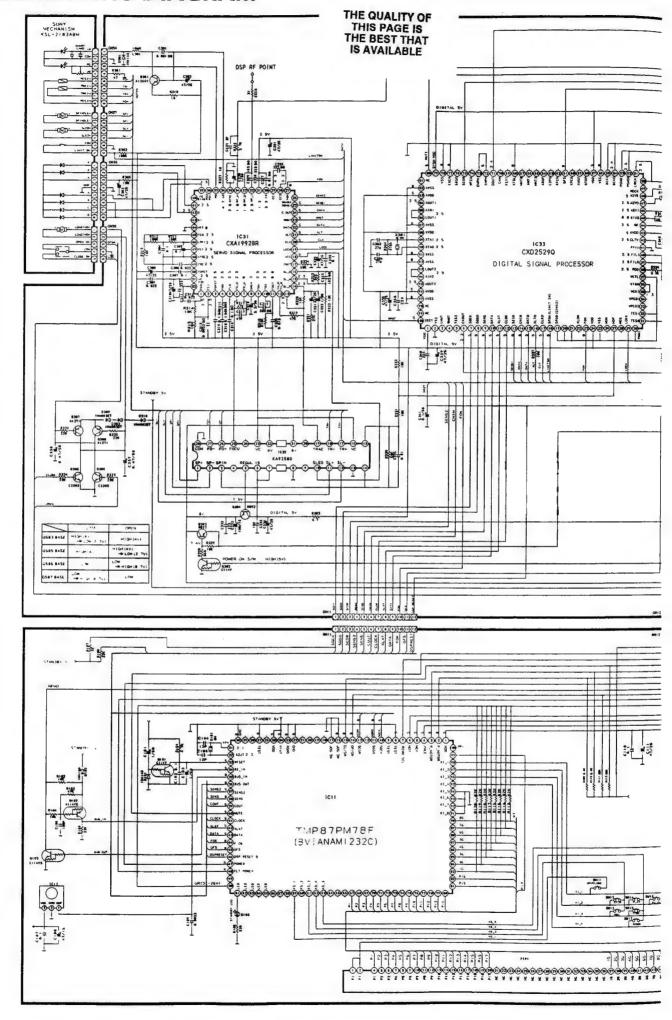


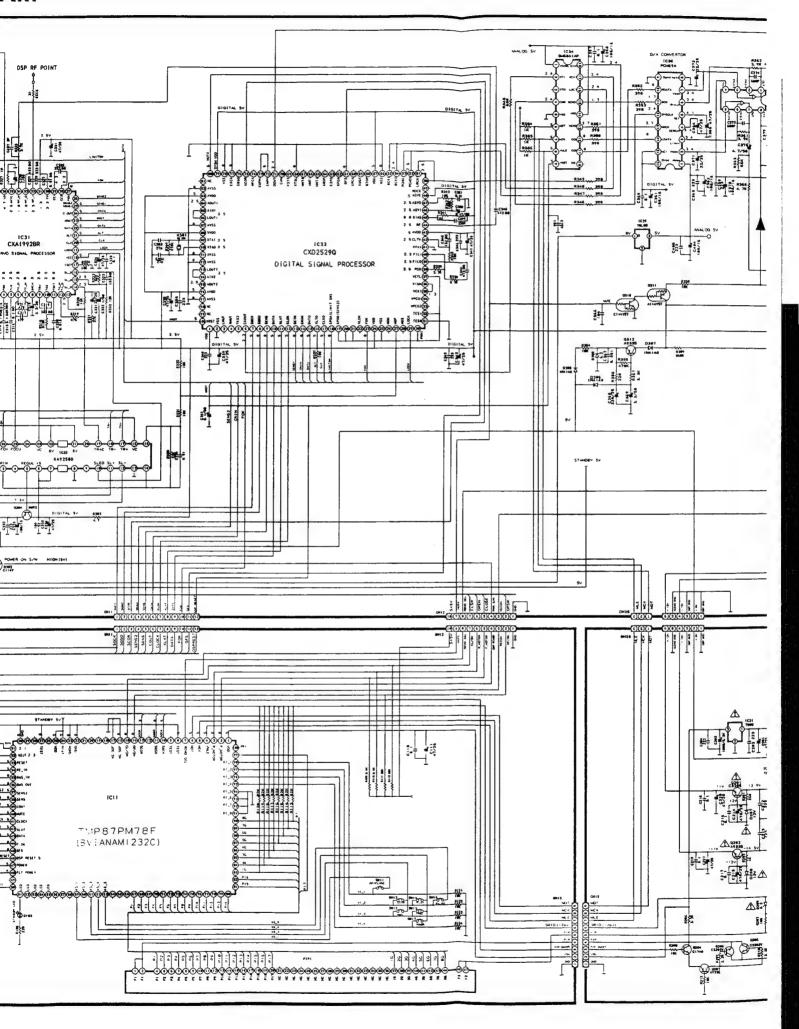
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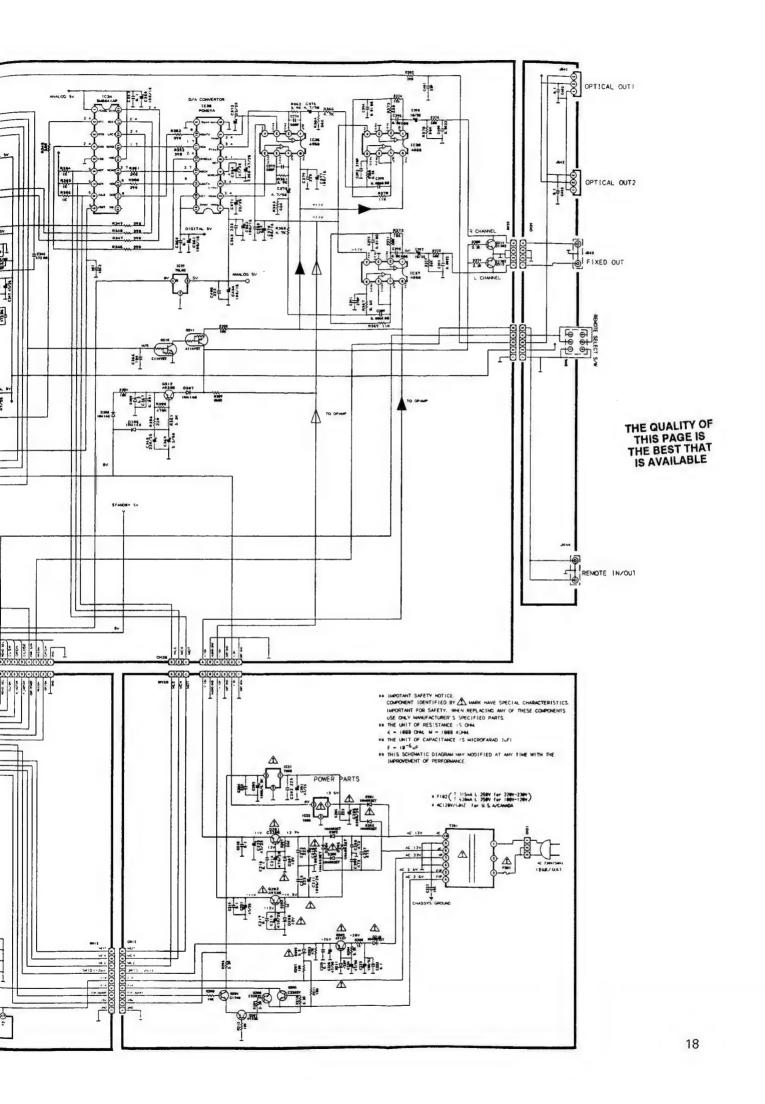
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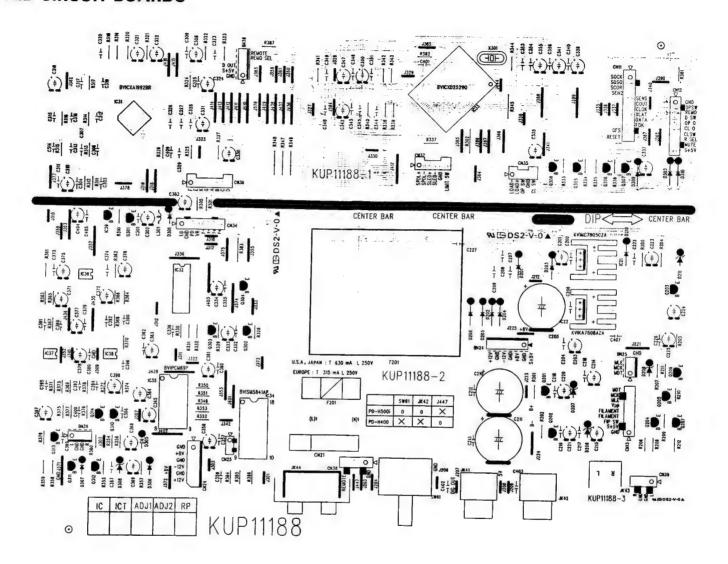
#### **SCHEMATIC DIAGRAM**

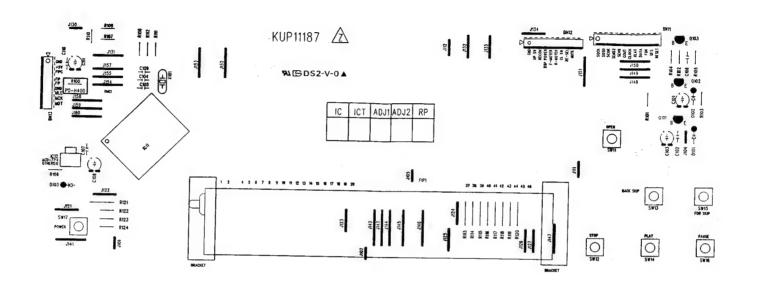






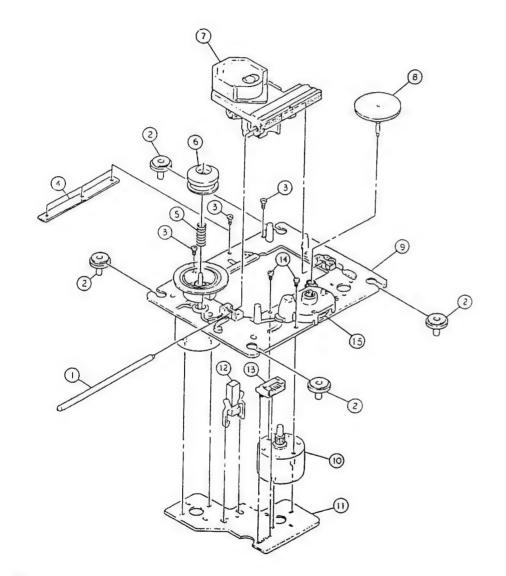
#### PRINTED CIRCUIT BOARDS





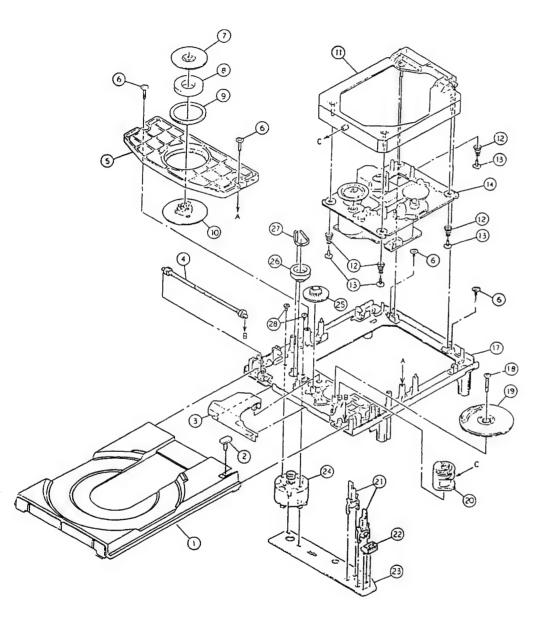
## **MECHANISM ASS'Y**

## KSM-2101ABM Disassembly Drawing



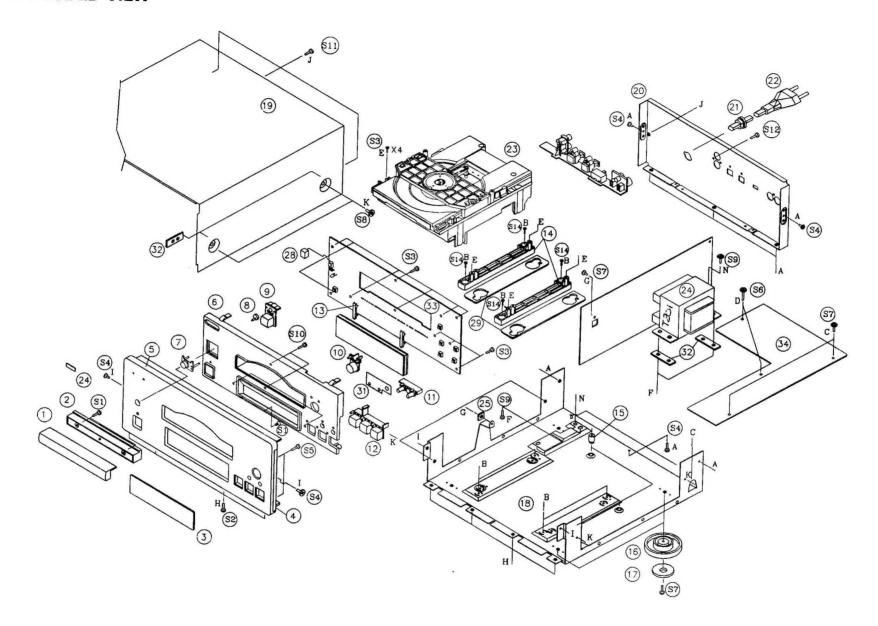
REF. NO.	PARTS NO.		
			REMARKS
2- 1 2- 2 2- 3 2- 4 2- 5	9A06967500 9A06967600	SLED SHAFT (S) INSULATOR (S) SCREW (2X5), TAPPING (S) REINFORCEMENT(S) SPRING (S), COMPRESSION	2-626-908-01 2-625-538-01 2-641-386-01 2-625-625-01 2-625-465-01
2-6 2-7 2-8 2-9 2-10	9A06968100	PIKU UP GEAR (A)(S) CHASSIS ASSY (MB), TT	2-625-477-01 8-848-127-31 2-625-462-02 X-2625-133-2 X-2625-132-1
?-11 ?-12 ?-13 :-14 -15	9A06968400 9A06968500	SWITCH, LEAF PIN, CONNECTOR 6P SCREW +P2X3	1-639-678-13 1-572-085-12 1-564-722-11 7-621-255-15 2-626-081-01

## KSL-2101 ABM Disassembly Drawing



EXPLOD	ED VIEW		
REF. NO.	PARTS NO.		REMARKS
1- 1 1- 2	9A072693 <b>00</b>	TRAY (S)	2-625-550-03
1-3	9A07268800	GEAR COVER (S)	2-625-544-02
1- 4 1- 5		TRAY GEAR CHUCKING PLATE	2-625-535-01 2-625-546-01
1-6		+PTPWH 2.6*7	
1-7	9A06965300	YOKE (S), SHUCKING	2-626-294-01 2-625-537-01
1-8 1-9	9A06965400 9A07268700		1-452-493-21
1-10		CHUCKING PULLY	2-625-541-02 2-625-548-02
1-11	9A07267600	SUB CHASSIS ASSY (S)	X-2625-227-2
1-12 1-13	9A06965800 9A07269600	SPRING (S)	2-625-539-01
1-14	0/10/205000	VACANT	2-625-730-01
1-15		VACANT	
1-16 1-17	0407260400	VACANT	
1-18	9A06966200	AUTO SAD MAIN CHSSIS (S) SCREW + PTPWH 2.6X16	2-625-552-07 3-319-501-51
1-19	9A07269100	DRIVER GEAR (S)	2-625-547-03
1-20 1-21	9A07269000	CONTROL CAM (S)	2-625-545-04
1-22	9A07268000 9A06966600	PIN, CONNECTOR 5P	1-692-667-11 1-564-721-11
1-23 1-24	9A07267900	LOADING PWB (S)	1-640-523-12
		MOTOR ASSY, LOADING	X-2625-117-1
1-26 1-28	9A07268600 9A06967200	LOADING PULLY SCREW +B2.6X2.5	2-625-536-02
		OUNCH . DZ.OAZ.J	2-625-279-01

#### **EXPLODED VIEW**



EX	D!	<b>n</b>	n	Er	١ (	/1	EW
$\Box \Lambda$	ᆫ	v	v	ᄄ	, ,	"	- **

REF. NO.	PARTS NO.		REMARKS
1	9A07264600	ORNAMENT, CD	KGX1A221XC11
2		DOOR, CD	KGR1A152K17
3	9A06240500		KGU1A154Y
4	9A06677600		KKM1A062C11
5	9A07270700	PANEL, AL	KKM1A054XC11
6	9A07264500	PANEL, SUB	KGW2A179ZK64
7		WINDOW,SENSOR	KGU2A155
8		INDICATOR,POWER	KGL1A120
9		KNOB, POWER	KBT1A387ZK64
10	9A06314300	KNOB, TACT (OPEN/CLOSE)	KBT1A385YK64
11		KNOB, TACT	KBT1A410C13
12	9A06316000	KNOB, TACT	KBT1A386WK64
13		BRACKET, FLT A4-92-1739	KMD1A209
14 15	9A07264800	MOUNT , PCB A4-92-1728	KHG2A163
13	3700223100	MOONT; POB A4-92-1726	KHE1A023
16	9A06315500		KKL1A047ZK63
17		CUSHION, FOOT	KHG1A039Z
18		CHASSIS , MAIN	KUA2A137
19 20		CABNET,TOP PANEL , REAR	KKC3B077S21
			KKF2A127SK59
		BUSHING,AC CORD HEYCO(SR-	KHR129
		CORD,POWER [E]	KJA2B019Z
		CORD,POWER [J]	KJA2J026Z
23		CDP MECHANISM ASS'Y	BJDKSL-2101ABM
24		BADGE,TEAC	BGB1A047
25	9A06229400	RUBBER, MECHA	KHG1A115
26		VACANT	
27	0400044000	VACANT	
		SUPPORT, SENSOR	KHG1A132
29 30	9A06241400	RUBBER, SUPPORT VACANT	KHG1A135
	9407270800	CD SUB PCB ASS'Y	KOP11187B
		CD MAIN PCB ASS'Y [E]	KOP11187B KOP11188B
		CD MAIN PCB ASS'Y [J]	KOP11188D
SI	9A06244200	SCREW KTS3+6J	KTS3+6J
		SCREW KTS3+8J	KTS3+8J
		SCREW,KTB3+10G	KTB3+10G
		SCREW,KTB3+8J	KTB3+8J
S5	9A06229000	SCREW, SPECIAL	KHD1A016
S6	9A06244300	SCREW KTW3+14J	KTW3+14J
		SCREW KTW3+8J	KTW3+8J
S8	9A05984300	SCREW KTB4+6FFZ	KTB4+6FFZ
S9	9A06545500	SCREW,SPECIAL	KHD2A018
S10	9A06316300	SCREW KTB+6F	KTB3+6F
S11	9A01377200	SCREW KTB3+8JFZ	KTB3+8JFZ
		SCREW,KTB3+10GFZ	KTB3+10GFZ
S13		VACANT	
S14	9A06241200	SCREW, SPECIAL	KHD5A009
Δ	9A06239400	FUSE, 2C0630TLE [J]	KBA2C0630TLE
	9A07270200		KBA2C0315TLU
		l	
	ACCESSORIE	S	DEMARKS
EF. NO.	PARTS NO.		REMARKS
	9A05935900	CORD.PIN	KJS4M014Y
	0,100000000		
	9A05936000	CORD,PIN	KJS4N001Y
!	9A05936000 9A07124600		

#### Resistor and Capacitor

Notes: Part numbers are indicated for most mechanical parts.

Please use this part number for parts order.

· IMPORTANT SAFETY NOTICE.

Components identified by  $\wedge$  mark have special characteristics important for safety. When replacing any of these components, use only manufacture's specified parts.

- The unit of resistance is OHM( Ω)

K=1000(Ω), M=1000(KΩ)

The unit of capacitance is MICROFARAD(μF).

· P=10-6μF

## ■ Numbering System of Resistor Example

KRD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value

Resistor Type	Wattage	Tolerance
KRD:Carbon	20:1/5W	F:=±1%
KRG:Metal Oxide	25:1/4W	J:=±5%
	50:1/2W	K:=±10%
	1:1W	
KRF:Metal Cement	2:2W	
	3:3W	

## ■ Numbering System of Capacitor Example

KCKT	1H	101	K	В
Type	Voltage	Value	Tolerance	Peculiarity

Consoitor Tuna	Vol		
Capacitor Type	<b>ECEA Type</b>	Other	Tolerance
KCB:Ceramic	OJ:6.3V	1H:50V DC	C:±0.25pF
KCC:Ceramic	1A:10V	1:125V DC	G: ± 2%
KCK:Ceramic	1C:16V	KC:400V AC	J:±5%
KCFR:Semiconductor	1E:25V		K: ± 10%
KCQI:Polyester	1H:50V		Z: +80%, -20%
KCQP:Polypropylene KCQS:Polystyrol	1V:35V		

CD	MA	N	PCR	ASS'Y

REF. NO.	PARTS NO.		REMARKS
	9A07265600	CD MAIN PCB ASS'Y	KOP11188G
	9A07266300	CD MAIN PCB	KUP11188Z
		IC. KA7805-ABTU	KVIMC7805C
		IC.KA7808-ABTU	KVIKA7808A
		HOLDER, FUSE KJCFC5S	KJCFC5S
205	A 9A06246900	CAP, ELECT KCEA1EH332E	KCEA1EH332E
2210 211	M 9A06240300	CAP, ELECT KCEA1EAH102E	KCEA1EAH102E
214 215	A 9A07264000	CAP, ELECT KCEA1EAHS471E	KCEA1EAHS471E
201-204	A 9A05194700	DIODE,1N4003ST	KVD1N4003ST
207 208	⚠ 9A05359600	DIODE,ZENER MTZJ12BT	KVDMTZJ12BT
		DIODE, ZENER MTZJ6.2BT	KVDMTZJ6.2BT
		DIODE,1N4003ST	KVD1N4003ST
0211	A 9A05193700	DIODE, ZENER MTZJ24BT	KVDMTZJ24BT
		DIODE, IN4148MT	KVD1N4148MT
		DIODE, IN4003ST	KVD1N4003ST
305-307		DIODE, IN4148MT	KVD1N4148MT
	∆ 9A06236200	DIODE, ZENER MTZJ6.2BT	KVDMTZJ6.2BT
309 310	A 9405194700	DIODE,1N4003ST	KVD1N4003ST
C31	9A06867800		BVICXA1992BR
C32		IC,KA9258D	KVIKA9258D
C33	9A06867900		BVICXD2529Q
C34	9407263800	I.C., DIGITAL FILTER	BVISM5841AP
C35	9A07263700		BVIPCM69P
C36-38	9A06871800		KVIKA4558D
		I.C KA78L05AZTA	KVIKA78L05A
IK41		MODULE, OPTICAL	BJS9L001Z
JK43	9A06242100	JACK, LINE IN TERMINAL	KJJ4N005Y
IK44	9A06242200	JACK, BOARD	KJJ4N016Z
301	9A05356900	COIL , AXAIL 10UH,K	KLQ02C100KT
2201		TR,KTC3205YT	KVTKTC3205YT
	⚠ 9A05911600		KVT2SA933SRT
		TR.KSA916-Y-SHTA	KVTKSA916YT
204		TR,2SC1740SR	KVT2SC1740SRT
		TR,KTC3203YT	KVTKTC3203YT
207		TR,2SA933SR	KVT2SA933SRT
301	9A05895900	TR,KTA1266YT	KVTKTA1266YT
302	↑ 9A05196500	TR,DTC114YST	KVTDTC114YST
303.304	↑ 9A05219100	TR,2SB892T	BVT2SB892T
305.306	∆ 9A06871900	TR,KTC3205YT	KVTKTC3205YT
307.308 4	№ 9A05197200	TR,KTA1271YT	KVTKTA1271YT
2310	∆ 9A05196500	TR,DTC114YST	KVTDTC114YST
2311	∆ 9A05196400	TR,DTA114YST	KVTDTA114YST
2312	9A05911600	TR,2SA933SR	KVT2SA933SRT
313.314	∆ 9A05197500	TR,KTD1302T	KVTKTD1302T
		TRANS, POWER	KLT5M016ZE
301		CRYSTAL, 16934A120C	KOX16934A120C

REF. NO. PAF	RTS NO.	REMARKS
	7265500 CD SUB PCB ASS'Y	KOP11187C
9A0	5961600 BRACKET, FLT A4-92-1739	KMD1A209
9A0	7266200 CD SUB PCB	KUP11187Z
C108 🛕 9A0	6904800 CAP,ELECT ACKS470T	KCEA1CKS470T
0101.102 9A0	1390500 DIODE,1N4148MT	KVD1N4148MT
0103 9A0	5195000 LED,RED SLR342VCF02	KVD342VCF02T085
FIP1 9A0	7313300 F.I.P. SVA08MS14	KFLSVA08MS14
C11 9A0	6867700 I.C.MICOM ANAM1232C	BVIANAM1232C
2101.103 9A0	5196500 TR.DTC114YST	KVTDTC114YST
2102 9A0	5196400 TR.DTA114YST	KVTDTA114YST
SW11-17 9A0	6671200 SW.TACT EVQ21505R	BST1A014ZT
(101 9A0	5193000 CRYSTAL. 08000E160C	KOX08000E160C